

IN THE CLAIMS

Please AMEND the claims as follows:

1-51. (Cancelled)

52. (Currently Amended) A method for modifying the saturated fatty acid content in transgenic plant seeds, comprising:

a) providing for expression of a heterologous β -ketoacyl-ACP synthase protein in said transgenic plant, wherein said heterologous β -ketoacyl-ACP synthase comprises an amino acid sequence at least 95% identical to SEQ ID NO: 2, and

b) providing for expression of a heterologous delta-9 desaturase protein in said transgenic plant,

e) such that said transgenic plant produces said heterologous β -ketoacyl-ACP synthase protein and said heterologous delta-9 desaturase protein and thereby modifies the saturated fatty acid content in said transgenic plant seeds.

53. (Currently Amended) The method according to claim 52, wherein said heterologous β -ketoacyl-ACP synthase comprises the coding sequence set forth in SEQ ID NO: 1.

54. (Currently Amended) The method according to claim 52, wherein said heterologous β -ketoacyl-ACP synthase ~~has~~ comprises the amino acid sequence set forth in SEQ ID NO: 2.

55. (Currently Amended) The method according to claim 52, wherein said heterologous delta-9 desaturase is a safflower delta-9 desaturase.

56. (Previously Presented) The method according to claim 52, wherein said method further comprises providing for expression of a second heterologous β -ketoacyl-ACP synthase protein.

57. (Cancelled)

58. (Previously Presented) The method according to claim 52, wherein said modification of saturated fatty acids is a reduction in total saturated fatty acids.

59. (Previously Presented) The method according to claim 52, wherein said modification of saturated fatty acids is a reduction in C16:0 fatty acids.

60. (Previously Presented) The method according to claim 52, wherein said modification of saturated fatty acids is a reduction of total fatty acids to a level less than about 3.5 weight percent.

61. (Currently Amended) The method according to claim 52, wherein said heterologous β -ketoacyl-ACP synthase and said heterologous delta-9 desaturase are arranged in a monocistronic configuration in an expression construct.

62. (Currently Amended) The method according to claim 52, wherein said heterologous β -ketoacyl-ACP synthase and said heterologous delta-9 desaturase are arranged in a polycistronic configuration in an expression construct.

63. (Currently Amended) The method according to claim 52, wherein said heterologous β -ketoacyl-ACP synthase and said heterologous delta-9 desaturase are provided on separate expression constructs.

64. (Currently Amended) The method according to claim 52, wherein said heterologous β -ketoacyl-ACP synthase and said heterologous delta-9 desaturase are provided by

crossing a plant line expressing said β -ketoacyl-ACP synthase with a plant line expressing said desaturase.

65. (Cancelled)

66. (New) A method for modifying the saturated fatty acid content in transgenic plant seeds, comprising:

- a) providing for expression of a heterologous β -ketoacyl-ACP synthase protein in said transgenic plant that comprises a coding sequence at least 95% identical to SEQ ID NO: 1, and
- b) providing for expression of a heterologous delta-9 desaturase protein in said transgenic plant, such that said transgenic plant produces said heterologous β -ketoacyl-ACP synthase protein and said heterologous delta-9 desaturase protein and thereby modifies the saturated fatty acid content in said transgenic plant seeds.

67. (New) A method for modifying the saturated fatty acid content in transgenic plant seeds, comprising:

- a) providing for expression of a heterologous β -ketoacyl-ACP synthase protein in said transgenic plant, wherein said heterologous β -ketoacyl-ACP synthase is a *Cuphea pulcherrima* KAS I, and
- b) providing for expression of a heterologous delta-9 desaturase protein in said transgenic plant;
- c) producing in said transgenic plant said heterologous β -ketoacyl-ACP synthase protein and said heterologous delta-9 desaturase protein and thereby
- d) modifying the saturated fatty acid content in said transgenic plant seeds.

68. (New) The method according to claim 67, wherein said method further comprises providing for expression of a second heterologous β -ketoacyl-ACP synthase protein.

69. (New) The method according to claim 68, wherein said second heterologous β -ketoacyl-ACP synthase is a *Cuphea pulcherrima* KAS IV.

70. (New) The method according to claim 67, wherein said heterologous delta-9 desaturase is a safflower delta-9 desaturase.

71. (New) The method according to claim 69, wherein said heterologous delta-9 desaturase is a safflower delta-9 desaturase.